



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

First3.99

Industrial Code: **4952**
Discharge Class (CL): **05**
Toxic Class (TX): **T**
Major Drainage Basin: **17**
Sub Drainage Basin: **02**
Water Index Number: **E.R. (10.1-12.3)**
Compact Area: **IEC**

SPDES Number: **NY- 0026158**
DEC Number: **2-6301-00008/00001**
Effective Date (EDP): **11/01/2010**
Expiration Date (ExDP): **10/31/2015**
Modification Dates:

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act") and the Water Quality Regulations of the Interstate Environmental Commission at 21 NYCRR Part 550.

PERMITTEE NAME AND ADDRESS

Name: **New York City Department of Environmental Protection** Attention: **Vincent Sapienza, Deputy Commissioner**
Street: **59-17 Junction Boulevard**
City: **Corona** State: **NY** Zip Code: **11368**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Bowery Bay WPCP**
Location (C,T,V): **Queens** County: **Queens**
Facility Address: **43-10 Berrian Boulevard**
City: **Astoria** State: **NY** Zip Code: **11102**
NYTM -E: NYTM - N:
From Outfall No.: **001** at Latitude: **40 ° 48 ' 07 "** & Longitude: **73 ° 53 ' .3 "**
into receiving waters known as: **Rikers Island Channel** Class: **I**
and; (list other Outfalls, Receiving Waters & Water Classifications)

See Additional Outfall Page of this permit

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **New York City Department of Environmental Protection**
Street: **59-17 Junction Boulevard**
City: **Corona** State: **NY** Zip Code: **11368**
Responsible Official or Agent: **Vincent Sapienza** Phone: **(718) 595-4906**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

Bureau of Water Permits
RWE
RPA
IEC
EPA, Reg. II - Jeff Gratz
EFC

Deputy Chief Permit Administrator: Stuart M. Fox	
Address: Division of Environmental Permits 625 Broadway Albany, NY 12233-1750	
Signature: <i>Stuart M. Fox</i>	Date: 10/ 18/ 10

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I COMBINED SEWER OUTFALLS LOCATIONS

Outfall	Latitude	Longitude	Location	Size	Waterbody	Comments	Class
002	40,46,52	73,53,19	45th St. (Reg #2)	9' x 9'	Rikers Island Channel		I
003	40,46,45	73,53,11	Hazen St. (Reg #3)	66" DIA	Bowery Bay	Telemetered	I
004	40,44,26	73,56,33	5' n/o Borden Ave.	6'6" x 3'3"	Dutch Kills		I
005	40,46,31	73,53,10	e/o 81st St. (Reg #4)	14'7" x 8'	Flushing Bay	Boom	I
006	40,45,41	73,51,03	Corona Ave. Vortex - 114th St. (Reg #10, 12, 13, 20, 26)	4BL10'6" x 9'3"	Flushing Bay	Boom	I
007	40,45,52	73,51,25	27th Ave. (Reg #5)	11' x 7'6"	Flushing Bay		I
008	40,45,52	73,51,22	31st Dr. (Reg #6,7,8,9)	DBL 13'9" x 8'	Flushing Bay	Telemetered (6 & 9), Boom	I
009	40,44,32	73,56,27	Hunterspoint Ave. (Reg #L-3B)	11' x 4'6"	Dutch Kills		I
010	40,44,27	73,56,31	Midtown Tunnel (Reg #L-3C)	30" DIA	Dutch Kills		I
011	40,44,01	73,56,17	Greenpoint Ave Bridge (Reg #L-1)	24" DIA	Newtown Creek		I
012	40,44,04	73,56,17	35th St. (Reg #L-2)	24" DIA	" "		I
013	40,44,23	73,57,04	11th St. (Reg #L-8)	72" DIA	" "		I
014	40,44,24	73,57,11	Vernon Boulevard (Reg #L-9)	22" DIA	" "		I
015	40,44,23	73,57,13	5th St. (Reg #L-10)	15" DIA	" "		I
016	40,44,44	73,57,28	51st Ave. (Reg #L-11)	24" DIA	East River		I
017	40,44,44	73,57,28	50th Ave. (Reg #L-12)	15" DIA	East River		I
018	40,44,45	73,57,27	49th Ave. (Reg #L-12A)	18" DIA	East River		I
019	40,44,46	73,57,26	48th Ave. (Reg #L-13)	12" DIA	East River		I
020	40,44,47	73,57,25	47th Rd. (Reg #L-14)	12" DIA	East River		I
021	40,44,50	73,57,22	47th Ave. (Reg #L-15)	48" DIA	East River		I
022	40,44,59	73,57,14	5th St. (Reg #L-16)	18" DIA	East River		I
023	40,45,00	73,57,13	44th Dr. (Reg #L-17)	66" DIA	East River		I
024	40,45,16	73,56,58	43rd Ave. (Reg #L-18)	7'8" x 7'7"	East River		I
025	40,45,31	73,56,47	41st Ave. (Reg #L-19)	48" DIA	East River		I
026	40,44,65	73,56,48	Betw. 28th & 29th St. (Reg #L-4, -39, -40, -42)	9' x 4'6"	Dutch Kills	Telemetered	I
027	40,45,37	73,56,44	38th Ave. (Reg #L-20)	72" DIA	East River		I

I COMBINED SEWER OUTFALLS LOCATIONS continued

Outfall	Latitude	Longitude	Location	Size	Waterbody	Comments	Class
028	40,45,46	73,56,37	37th Ave. (Reg #L-21)	DBL 12' x 8'13/4"	East River	Telemetered	I
029	40,46,12	73,56,01	Broadway (Reg #L-22)	16' x 7'	East River	Telemetered	I
030	40,46,20	73,55,58	30th Rd. (Reg #L-23)	24" DIA	East River	Telemetered	I
032	40,45,31	73,56,08	100' s/o Astoria Blvd. (Reg #L-29, -29A, MH#15)	48" DIA	East River		I
033	40,46,38	73,56,04	27th Ave. (Reg #L-27)	15" DIA	East River		I
034	40,46,43	73,55,34	Hoyt Ave. (Reg #L-30)	10'8" x 7'4"	East River	Telemetered	I
035	40,47,04	73,55,02	Ditmars Blvd. (Reg #L-31)	18' DIA	East River		I
036	40,47,10	73,54,55	100' s/o 21st Ave. (Reg #L-32)	24" DIA	East River		I
037	40,47,20	73,54,46	20th Ave. (Reg #L-33)	24" DIA	East River		I
038	40,47,20	73,54,46	20th Ave. (Reg #L-34)	12" DIA	East River		I
040	40,44,32	73,56,32	under 49th Ave. Bridge (Reg #L-5)	24" DIA	Dutch Kills		I
041	40,46,50	73,54,09	19th St. (Reg #1)	6' x 6'	Rikers Island Channel		I
042	40,44,24	73,56,30	w/o 27th St. (Reg #L-6)	12" DIA	Dutch Kills		I
043	40,44,25	73,56,59	11th St.(Reg #L-7)	54" DIA	Newtown Creek		I
044	40,44,42	73,57,30	54th Ave. (Reg #L-22A)	24" DIA	East River		I
045	40,46,40	73,55,38	9th St. (Reg #L-25)	8" DIA	East River		I
046	40,46,44	73,55,53	3rd St. (Reg #L-26)	8" DIA	East River		I
047	40,46,43	73,55,56	Astoria Blvd. (Reg #L-28)	18" DIA	East River		I
049	40,44,21	73,56,53	21st St.	2'8" x 4'	Dutch Kills		I
053	40,47,20	73,54,46	20th Ave.	48" DIA	Hellgate (E)		I

II MUNICIPAL SEPARATE STORM SEWER SYSTEM OUTFALLS

Outfall	Latitude	Longitude	Location	Size	Waterbody
601	40,45,53	73,50,33	FLUSHING BAY & 127th STREET	60" DIA	FLUSHING BAY
602	40,45,48	73,50,43	FLUSHING BAY & 126th STREET	60" DIA	FLUSHING BAY
603	40,47,01	73,53,29	RIKERS ISLAND CHANNEL & STEINWAY STREET	7' x 6'6"	RIKERS ISLAND CHANNEL
606	40,44,39	73,57,37	49 th AVENUE	60" DIA	EAST RIVER
607	40,44,47	73,57,35	47 TH AVENUE	36" DIA	EAST RIVER

III PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	Limitations Apply	RECEIVING WATER	EFFECTIVE		EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include sanitary and combined (sanitary & stormwater) wastewater.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (Estimated Date of Permit (EDP) or Estimated Date of Permit Modification (EDPM))		The date this page is no longer in effect ExDP.
PARA-METER	Effluent Limitation Type	Effluent Limitation	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	<p><u>Monthly Avg., Range, Daily Min., and Daily Max.</u> are defined below.</p> <p><u>Monthly Avg. (30 day arithmetic mean, 30 day average)</u> is the arithmetic mean of all sample values measured during the monitoring period of one month (30 days) in length.</p> <p><u>7 day arithmetic mean (7 day average)</u> is the arithmetic mean of all sample values measured during the monitoring period of one week (7 days) in length.</p> <p><u>30 day geometric mean</u> is the geometric mean of samples taken within a 30 consecutive day period.</p> <p><u>7 day geometric mean</u> is the geometric mean of samples taken within a 7 consecutive day period.</p> <p>See DMR Manual for more information.</p>	The effluent limitation is developed based on the more stringent of technology-based standards, required under the Clean Water Act, New York State water quality standards, or Interstate Environmental Commission water quality regulations. All determinations of compliance with substance specific discharge limits are made by comparing monitoring results to the effluent limitation. See the DMR Manual for information on how to calculate and report effluent limits.	This can include units of flow, pH, temperature, mass or concentration. Examples include SU, °F, µg/l, lbs/d, etc.	Examples include daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

DAILY DISCHARGE.: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the ‘daily discharge’ is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the ‘daily discharge’ is calculated as the average measurement of the pollutant over the day.

DAILY MAX.: The maximum allowable daily discharge. Where limitations are expressed in other units of measurement, the daily discharge is the arithmetic average of the pollutant derived from all measurements taken that day.

DAILY MIN.: The minimum allowable discharge during a calendar day. Calculated in the same manner as the DAILY MAX.

MONTHLY AVG.: The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. (Daily average)

RANGE: The minimum instantaneous measurement and the maximum instantaneous measurement taken over the reporting period comprise the reportable range.

ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

TYPE I: The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level.

TYPE II: The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

IV PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL NUMBER	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	<input checked="" type="checkbox"/> All Year <input type="checkbox"/> Seasonal from _____ to _____	East River	04/01/2003	10/31/2015

PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				Foot Notes
	Type	Limitation	Units	Limitation	Units	Sample Frequency	Sample Type	Location Influent	Effluent	
Flow, Total	12 month rolling average	150.	MGD			Continuous	Recorder	X		(9)
Flow, Total	Monthly average	Monitor	MGD			Continuous	Recorder	X		
CBOD ₅	Monthly average	25	mg/l	31000	lbs/day	1 /Day	24 hour Composite.	X	X	(1)
CBOD ₅	7 day arithmetic mean	40	mg/l	50000	lbs/day	1 /Day	24 hour Composite	X	X	
BOD ₅	6 consecutive hour avg.	50	mg/l						X	(5)
Dissolved Oxygen	Daily Minimum	Monitor	mg/l			2/Month	Grab		X	
Solids, Suspended	Monthly average	30	mg/l	38000	lbs/day	1 / Day	24 hour Composite	X	X	(1)
Solids, Suspended	7 day arithmetic mean	45	mg/l	56000	lbs/day	1 / Day	24 hour Composite	X	X	
Solids, Suspended	Daily Maximum	50	mg/l			1 / Day	24 hour Composite		X	(4)
Solids, Suspended	6 consecutive hour avg.	50	mg/l							(5)
pH	Range	6.0 - 9.0	SU			6 / Day	Grab		X	
Phosphorus, Total (as P)	Monthly average	Monitor	mg/l			2/month	24 hour Composite	X	X	
Soluble Orthophosphate (as P)	Monthly average	Monitor	mg/l			2/month	24 hour Composite	X	X	
Temperature	Daily Maximum	Monitor	Deg C			6 / Day	Grab		X	

FOOTNOTES on page 9.

IV PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL NUMBER	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	<input checked="" type="checkbox"/> All Year <input type="checkbox"/> Seasonal from _____ to _____	East River	04/01/2003	10/31/2015

PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				Foot Notes
	Type	Limitation	Units	Limitation	Units	Sample Frequency	Sample Type	Location Influent	Effluent	
Chlorides	Monthly average	Monitor	mg/l			2/month	24 hour Composite	X		
Tetrachloroethylene	Daily Maximum			12.5	lbs/d	1/month	24 hour Composite		X	(8)
Cyanide	Daily Maximum			75	lbs/d	1/month	24 hour Composite		X	(2)
Mercury, Total	Daily Maximum			1.0	lbs/d	1/week	24-hour composite		X	(6)
Arsenic, Total	Daily Maximum	Monitor	ug/l			1/month	24-hr. composite		X	
Priority Pollutant Scan		Monitor	ug/l			1/year	24-hour composite	X	X	(7)
Effluent Disinfection required: [X] All Year [] Seasonal from _____ to _____										
Coliform, Fecal	30 day geometric mean	200	No./100 ml			1 / Day	Grab		X	
Coliform, Fecal	7 day geometric mean	400	No./100 ml			1 / Day	Grab		X	
Coliform, Fecal	6 hour geometric mean	800	No./100 ml			1 / Day	6-hr. composite		X	(5)
Coliform, Fecal	Instantaneous Maximum	2400	No./100 ml			1 / Day	Grab		X	(5)
Chlorine, Total Residual	Daily Maximum	2.0	mg/l			6 / Day	Grab		X	(3)

FOOTNOTES on page 9.

V FOOTNOTES

- (1) and effluent shall not exceed 15 % and 15 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30-day arithmetic mean percent removal limitations. However, all concentrations shall be used in the calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.
- (2) The Cyanide limit is based on a Practical Quantitation Limit (PQL) of 60 ug/l, using EPA Method 335.2 or 335.3.
- (3) This is an interim limit of 2.0 mg/l, which shall be in effect until completion of construction of facilities necessary to achieve compliance with the final water quality based effluent limit. See the TRC compliance schedule in this permit.
- (4) During periods of wet weather, which results in an instantaneous plant influent flow that is equal to or greater than twice the permitted flow, the TSS Daily Maximum limit of 50 mg/l shall not apply for the day of measured flow nor for the succeeding day.
- (5) This is an Interstate Environmental Commission (IEC) requirement. The permittee is not required to perform this sampling but shall be required to meet the permit limit at all times. EPA, DEC or IEC may perform the sampling.
- (6) The Mercury limit is based on a PQL of 0.8 ug/l, using EPA Method 245.1 or 245.2.
- (7) The monitoring results for this requirement shall not be submitted on the Discharge Monitoring Reports, but shall be submitted in report form to the Regional Water Engineer, within 60 days of the end of the calendar year. The monitoring results shall be on personal computer diskette, in an Excel spreadsheet, and include the flow for the day the sample was taken. Analysis of 2,3,7,8-TCDD is not required. Sample type for volatile organics shall be a 6 hour composite of 3 grab samples, one taken each 3 hours.
- (8) Samples shall be 6 hour composites of 3 grab samples, 1 taken each 3 hours.
- (9) A 12-month rolling average is defined as the average of the current month with the eleven previous months. The 12-month rolling averages shall be calculated using total influent flow.

VI Long Island Sound TMDL - Nitrogen Water Quality Based Effluent Limits and Monitoring - Phase I

OUTFALL NUMBER	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[X] All Year [] Seasonal from _____ to _____	East River	08/01/2004	07/31/2009

PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				Foot Notes
	Type	Limitation	Units	Limitation	Units	Sample Frequency	Sample Type	Location Influent Effluent		
Total Nitrogen (LISS Zone 8 + 9 Aggregate, including CSOs)	Annual Average			85,770	lbs/day	1/year	calculated		X	(1) (6)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, WPCPs only)	12 Month Rolling Average			83,012	lbs/day	1/month	calculated		X	(1)(4)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, for CSOs only)	Annual Average			Monitor	lbs/day	1/year	calculated		X	(6)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen from WPCP	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	
Total Nitrogen from WPCP	Monthly average	Monitor	mg/l	Monitor	lbs/day	1/day	calculated	X	X	(5)
Nitrogen, Ammonia (as NH ₃)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrogen, TKN (as N)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrate (NO ₃) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrite (NO ₂) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	

See FOOTNOTES on page 13.

VI Long Island Sound TMDL - Nitrogen Water Quality Based Effluent Limits and Monitoring - Phase II

OUTFALL NUMBER	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	<input checked="" type="checkbox"/> All Year <input type="checkbox"/> Seasonal from _____ to _____	East River	08/01/2009	07/31/2014

PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				Foot Notes
	Type	Limitation	Units	Limitation	Units	Sample Frequency	Sample Type	Location Influent	Effluent	
Total Nitrogen (LISS Zone 8 + 9 Aggregate, including CSOs)	Annual Average			62,843	lbs/day	1/year	calculated		X	(1)(6)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, WPCPs only)	12 Month Rolling Average			60,696	lbs/day	1/month	calculated		X	(1)(4)(7)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, for CSOs only)	Annual Average			Monitor	lbs/day	1/year	calculated		X	(6)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen from WPCP	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	
Total Nitrogen from WPCP	Monthly average	Monitor	mg/l	Monitor	lbs/day	1/day	calculated	X	X	(5)
Nitrogen, Ammonia (as NH ₃)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrogen, TKN (as N)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrate (NO ₃) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrite (NO ₂) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	

See FOOTNOTES on page 13.

VI Long Island Sound TMDL - Nitrogen Water Quality Based Effluent Limits and Monitoring - Phase III

OUTFALL NUMBER	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[X] All Year [] Seasonal from _____ to _____	East River	08/01/2014	10/31/2015

PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				Foot Notes
	Type	Limitation	Units	Limitation	Units	Sample Frequency	Sample Type	Location Influent Effluent		
Total Nitrogen (LISS Zone 8 + 9 Aggregate, including CSOs)	Annual Average			46,468	lbs/day	1/year	calculated		X	(1)(6)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, WPCPs only)	12 Month Rolling Average			44,325	lbs/day	1/month	calculated		X	(1)(4)(8)
Total Nitrogen (LISS Zone 8 + 9 Aggregate, for CSOs only)	Annual Average			Monitor	lbs/day	1/year	calculated		X	(6)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 8 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(2)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen (LISS Zone 9 WPCP Aggregate)	Monthly average			Monitor	lbs/day	1/month	calculated		X	(3)
Total Nitrogen from WPCP	12 Month Rolling Average			Monitor	lbs/day	1/month	calculated		X	
Total Nitrogen from WPCP	Monthly average	Monitor	mg/l	Monitor	lbs/day	1/day	calculated	X	X	(5)
Nitrogen, Ammonia (as NH ₃)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrogen, TKN (as N)	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrate (NO ₃) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	
Nitrite (NO ₂) as N	Monthly average	Monitor	mg/l			1/day	24 hour composite	X	X	

See FOOTNOTES on page 13.

VI FOOTNOTES FOR LONG ISLAND SOUND WATER QUALITY BASED EFFLUENT LIMITS AND MONITORING

(1) The Long Island Sound Study (LISS) is currently reviewing the basis for the nitrogen reduction targets, which may result in proposed modifications to the Total Maximum Daily Load (TMDL) for Dissolved Oxygen in Long Island Sound. If the TMDL is modified and approved by EPA, the Department may reopen the permit to modify the nitrogen effluent limits in this permit to reflect the wasteload allocations (WLAs) in the revised TMDL or the permittee may request such modification.

Interim limits and a compliance schedule to meet the final Nitrogen effluent limits are included in the Consent Judgment, Index No. 04-402174, ordered February 1, 2006 and are incorporated herein. Under the Consent Judgment and this SPDES permit, these limits will be in effect until January 1, 2017. The interim limits are as follows:

Effective Date	Zone 8 + 9 Aggregate Limit ⁽⁴⁾
Current	108,375
12/01/09	101,075
7/01/10	86,375
7/01/12	77,275
8/1/14	52,275
1/1/17	44,325 ⁽⁸⁾

(2) The LISS Zone 8 Aggregate is defined as the sum of effluent discharges from Bowery Bay, Hunts Point, Tallman Island and Wards Island WPCPs.

(3) The LISS Zone 9 Aggregate is defined as the sum of the effluent discharges from Newtown Creek and Red Hook WPCPs.

(4) The LISS Zone 8 + 9 Aggregate is defined as the sum of the Zone 8 Aggregate and one-fourth of the Zone 9 Aggregate.

(5) Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrite (NO₂) + Nitrate (NO₃).

(6) Monthly average discharges from CSOs shall be calculated once per year using the approved method in Calculation of Total Nitrogen Loading from CSOs, HydroQual, September 29, 2004 and submitted in an annual report, due each April 1st. The annual average shall be reported on the April DMR and shall represent the previous calendar year. Calculation of the Zone 8 + 9 CSO Aggregate shall be the sum of the LISS Zone 8 monthly average CSO loadings plus one-fourth of the Zone 9 monthly average CSO loadings. This value will be added to the Zone 8 + 9 WPCP Aggregate for the same 12-month period to calculate the Total Nitrogen LISS Zone 8 + 9 Aggregate, including CSOs.

(7) The limit is the total Zone 8 + 9 aggregate limit of 62,843 lbs/day less the CSO Zone 8 + 9 aggregate limit of 2,021 lbs/day = 60,822 lbs/day. However, it is projected, based on information in Calculation of Total Nitrogen Loading from CSOs, HydroQual, September 29, 2004, that the CSOs will not meet their 2009 CSO Zone 8 + 9 aggregate limit and will be short about 126 lbs/day. Thus, the WPCPs will have to remove an additional offset of 126 pounds of total nitrogen, making the 2009 WPCP Zone 8 + 9 aggregate limit 60,822 - 126 = 60,696 lbs/day.

(8) The limit is the total Zone 8 + 9 aggregate limit of 46,468 lbs/day less the CSO Zone 8 + 9 aggregate limit of 1495 lbs/day = 44,975 lbs/day (rounded up 2 pounds). However, it is projected, based on information in Calculation of Total Nitrogen Loading from CSOs, HydroQual, September 29, 2004, that the CSOs will not meet their 2014 CSO Zone 8 + 9 aggregate limit and will be short about 650 lbs/day. Thus, the WPCPs will have to remove an additional offset of 650 pounds of total nitrogen, making the 2014 WPCP Zone 8 + 9 aggregate limit 44,975 - 650 = 44,325 lbs/day. The department may reopen the permit, based on new information provided by the permittee, to revise the offset.

VII ACTION LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Municipal	Hendrix Street Canal	04/01/2003	10/31/2015

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Cadmium, Total				1.3	lb/d	1/month	24-hr. comp.	
Chromium, Total				8.0	lb/d	1/month	24-hr. comp.	
Copper, Total				32	lb/d	1/month	24-hr. comp.	
Lead, Total				11	lb/d	1/month	24-hr. comp.	
Nickel, Total				39	lb/d	1/month	24-hr. comp.	
Silver, Total				6.5	lb/d	1/month	24-hr. comp.	
Zinc, Total				111	lb/d	1/month	24-hr. comp.	
1,4-Dichlorobenzene				2.5	lb/d	1/month		(1)
Chloroform				3.8	lb/d	1/quarter		(1)

FOOTNOTES:

(1) Samples shall be 6 hour composites of 3 grab samples, 1 taken each 3 hours.

VIII MONITORING REQUIREMENTS FOR CSO REGIONAL FACILITIES

FACILITY: Corona Ave. Vortex

Outfall No: 006

The permittee is required to submit the "Corona Avenue Swirl Demonstration Report" pursuant to an Administrative Order on Consent, DEC Case No. R2-3351-90-12 (CSO Abatement Order). Upon review of such report, The Department may initiate the SPDES permit modification process to require monitoring and/or sampling at the Corona Ave. Vortex Facility.

SPECIAL CONDITIONS FOR OPERATION OF THE CORONA AVENUE VORTEX FACILITY

1. The facilities shall be operated in conjunction with the tributary sewer system, pump stations and the WPCP to maximize CSO capture.
2. The permittee shall operate the facility in accordance with the design criteria and the WWOP. The permittee shall notify the Department in writing, in accordance with 6 NYCRR Part 750, of any changes in the operation due to construction.
3. Flow shall not be delivered to the WPCP at a rate that will cause an upset as defined by 6 NYCRR Part 750-1.2(a).
4. If a new CSO Treatment Facility is constructed in the drainage basin of the WPCP, a NY-2A application, as well as the NY-2A Supplement for Control Facilities, must be submitted to the Department, and the permit modified to include the facility, before construction can commence. In addition, DEP shall modify the WWOP in CSO BMP#4 to reflect the changes required for the new facility.

IX BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS

The permittee shall implement the following Best Management Practices (BMPs). These BMPs are designed to implement operation & maintenance procedures, utilize the existing treatment facility and collection system to the maximum extent practicable, and implement sewer design, replacement and drainage planning, to maximize pollutant capture and minimize water quality impacts from combined sewer overflows. The BMPs are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy.

1. CSO Maintenance and Inspection Program -

- (a) The permittee shall develop and implement a written maintenance and inspection program for all CSOs listed beginning on page 3 of this permit. This program shall include all regulators tributary to these CSOs. This is to insure that no discharge or leakage occurs during dry weather and that the maximum amount of wet weather flow is conveyed to the WPCP for treatment. This program shall consist of scheduled inspections with required repair, cleaning and maintenance performed as needed to prevent dry weather overflow and leakage and ensure maximum wet weather flow is conveyed in accordance with CSO BMP # 4. Inspection reports shall contain a record of visual inspections, any observed flow, incidence of rain or snowmelt, condition of equipment and work required.
- (b) The permittee shall include in the maintenance and inspection program a plan to maintain CSO tidegates to prevent infiltration of seawater into the collection system such that the WPCF influent concentration of chlorides does not exceed a twelve month rolling average of 400 mg/l. The maintenance and inspection program shall specify corrective actions to be taken within twelve months of the influent chloride exceedance of 400 mg/l.
- (c) The permittee shall include in the maintenance and inspection program a schedule for telemetering the regulators listed in Omnibus IV. DEP shall summarize telemetering results in the annual CSO BMP report. Within six months after completion of the telemetering of regulators required in the NYSDEC/NYCDEP Omnibus IV Consent Order Compliance Schedule (as noted in the outfall description page), the permittee shall record and report the number and duration of events that cause a discharge at an outfall during dry weather conditions.
- (d) CSO maintenance and inspection program reports shall be available for DEC review no later than 9 AM on the day following the day the inspection was conducted and shall be available for DEC review at the associated WPCP no later than 30 days following the inspection.

2. Maximum Use of Collection System for Storage -

The permittee shall optimize the collection system by operating and maintaining it to minimize the discharge of pollutants from CSOs. It is intended that the maximum amount of in-system storage capacity be used (without causing service backups) to minimize CSOs and convey the maximum amount of combined sewage to the treatment plant in accordance with Item #4 below. This shall be accomplished by an evaluation of the hydraulic capacity of the system but should also include a program of flushing or cleaning to prevent deposition of solids and the adjustment of regulators and weirs to maximize storage.

3. Maximize Flow to POTW -

Factors cited in Item 2. above shall also be considered in maximizing flow to the POTW. Maximum delivery to the POTW is particularly critical in treatment of "first-flush" flows. The treatment plant shall be physically capable of receiving the peak design hydraulic loading rates for all process units. The treatment plant shall be physically capable of: receiving a minimum of 300 MGD through the plant headworks; a minimum of 300 MGD through the primary treatment works (and disinfection works if applicable; and a minimum of 225 MGD through the secondary treatment works during wet weather. The actual process control set points may be established by the Wet Weather Operating Plan required in BMP #4. The sewer collection system, regulating devices and head works must be capable of delivering these flows during wet weather. If the wet weather operating plan (WWOP) identifies any physical limitations, such as the secondary by-pass channel, the permittee shall submit a capital compliance schedule **within 6 months of DEC approval of the WWOP.**

4. Wet Weather Operating Plan -

The permittee shall maximize treatment during wet weather events. This shall be accomplished by having a wet weather operating plan containing procedures so as to operate unit processes, including any regional CSO treatment/retention facilities listed in this permit, to treat maximum flows while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The wet weather operating plan will establish process control procedures and set points to maintain the stability and efficiency of Biological Nitrogen Removal (BNR) process, if required, for the host WPCP. The wet weather operating plan shall be written in accordance with the NYSDEC publication, Wet Weather Operations & Wet Weather Operating Plan Development for Wastewater Treatment Plants, and submitted to the Region 2 Office for review and approval by July 20,2003.

The submission of a wet weather operating plan is a one time requirement that shall be done to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT".

5. **Prohibition of Dry Weather Overflow** - Dry weather overflows from the combined sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC Region 2 Office within 24 hours. A written report shall also be submitted within fourteen (14) days of the time the permittee becomes aware of the occurrence. Such reports shall contain the information listed in 6 NYCRR Part 750-2.7.
6. **Industrial Pretreatment** - The approved Industrial Pretreatment Program shall consider the impacts of discharges of toxic pollutants from unregulated, relocated, or new SIUs tributary to CSOs that were not identified in the report entitled, "*CSO Abatement in the City of New York: Report on Meeting the Nine Minimum CSO Control Standards*." The approved Industrial Pretreatment Program shall consider CSOs in the calculation of local limits for indirect discharges. Discharge of persistent toxics upstream of CSOs will be in accordance with guidance under (NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.3.8, New Discharges to POTWs. For industrial operations characterized by use of batch discharge, consideration shall be given to the feasibility of a schedule of discharge during conditions of no CSO. For industrial discharges characterized by continuous discharge, consideration must be given to the collection system capacity to maximize delivery of waste to the treatment plant. Non-contact cooling water should be excluded from the combined system to the maximum extent practicable. Direct discharges of cooling water must apply for a SPDES permit. To the maximum extent practicable, consideration shall be given to maximize the capture of industrial waste containing toxic pollutants and this wastewater should be given priority over residential/commercial service areas for capture and treatment by the POTW. These factors shall be considered in the location and siting of new industrial users with preference to service by areas not tributary to CSOs or having sufficient capacity to deliver all industrial wastewater during all conditions to the POTW.
7. **Control of Floatable and Settleable Solids** - The discharge of floating solids, oil and grease, or solids of sewage origin which cause deposition in the receiving waters, is a violation of the NYS Narrative Water Quality Standards. The permittee shall implement the following best management practices in order to eliminate or minimize the discharge of these substances:
 - a. **Catch Basin Repair and Maintenance** - The permittee shall inspect each catch basin in the tributary collection system a minimum of once every 36 months in accordance with a schedule to be outlined in the first annual CSO BMP report. Catch basins will be cleaned as required based on these inspections and in accordance with the permittee's criteria for catch basin cleaning. The permittee shall replace missing or damaged catch basin hoods within 90 days after the date of inspection for basins known to be hooded upon completion of the catch basin hooding program. For catch basins that have been identified during the catch basin hooding program, and that shall be listed in the annual report as needing extensive repairs before a hood can be installed, the permittee shall repair the catch basin and install a hood. The permittee shall maintain a schedule of repairing and installing hoods at a minimum of 1,000 catch basins per year and all 7,000 catch basins identified as requiring repair and hoods shall be completed by January 1, 2010. For all future basins found by inspection to require extensive repairs before a hood can be installed, the permittee shall repair and install a hood within 24 months.
 - b. **Catch Basin Retrofitting** - For catch basins that have been designed without a hood or which have been identified as unsuitable for installation of a hood, the permittee shall retrofit the basin with a device to effectively reduce the incidence of street litter from entering the combined sewer. The retrofitting may include replacement of street grating, restriction or elimination of curb cuts, installation of an outlet "90 degree elbow" catch basin sieves, or other device to limit street litter from entering the combined sewer system as approved by the Department.
 - c. **Booming, Skimming and Netting** - The permittee shall operate and maintain the floatable containment boom (or floatable containment netting) as applicable for the CSO outfalls listed in this permit. The in-water containment boom shall be inspected within 48 hours of a confirmed CSO event and, if necessary, cleared of floating debris. The permittee shall visually inspect floatable containment netting on a weekly basis and shall replace damaged or full netting bags as necessary.
 - d. **Institutional, Regulatory, and Public Education** - Within 24 months of the effective date of this permit, the permittee shall submit a report that examines institutional, regulatory, and public education programs to reduce the generation floatable litter as identified in the NYCDEP Phase I City-Wide Floatable Study. The report should examine programs within the City's legal authority and recommend alternatives, and an implementation schedule

that will reduce the water quality impacts of street and toilet litter. Upon approval by the Department the schedule shall become a requirement of this permit.

The permittee may submit an application to the Department for an alternative implementation schedule for Items 7. a., b., and c. for combined sewer areas that are tributary to a permanent land based CSO abatement and treatment facility designed as permitted by the Department for control of floatables.

8. **Combined Sewer System Replacement** - Replacement of combined sewers shall not be designed or constructed unless approved by NYS Department Of Health and specified in the NYCDEP Master Plan for Sewers and Drainage . When replacement of a combined sewer is necessary it shall be replaced by separate sanitary and storm sewers to the greatest extent possible. These separate sanitary and storm sewers shall be designed and constructed simultaneously but without interconnections to maximum extent practicable. When combined sewers are replaced, the design should contain cross sections which provide sewage velocities which prevent deposition of organic solids during low flow conditions.
9. **Combined Sewer/Extension** - Combined sewer/extension, when allowed should be accomplished using separate sewers. These sanitary and storm sewer extensions shall be designed and constructed simultaneously but without interconnections. No new source of storm water shall be connected to any separate sanitary sewer in the collection system. If separate sewers are to be extended from combined sewers, the permittee shall demonstrate the ability of the sewerage system to convey, and the treatment plant to adequately treat, the increased dry-weather flows. Upon written notification by the Region 2 Regional Water Engineer, the permittee shall assess the effects of the increased flow of sanitary sewage or industrial waste, on the frequency, flow and pollutant loading on the CSOs including the impacts on the receiving water quality and usage. This assessment should use techniques such as collection system and water quality modeling contained in the Water Environment Federation Manual of Practice FD-17 Combined Sewer Overflow Pollution Treatment.
10. **Sewer Connection & Extension Prohibitions** - If, there are documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes, the permittee shall, upon letter notification from DEC, prohibit further connections that would make the surcharging/back-up problems worse. Wastewater connections to the combined sewer system downstream of the last regulator or diversion chamber are prohibited.
11. **Septage and Hauled Waste** - The discharge or release of septage or hauled waste upstream of a CSO is prohibited.
12. **Control of Run-off** - All sewer certifications for new development shall be consistent with NYCDEP rules and regulations and shall require on-site detention or retention based on the Master Plan for Sewers and Drainage, NYCDEP, 1985, under which the sewers were designed and built. Only allowable flow will be permitted to discharge into the combined or storm sewer system.
13. **Public Notification** -
 - a. The permittee shall install and maintain identification signs at all CSO outfalls owned and operated by the permittee as listed on the Additional Combined Sewer Outfall page(s) of this permit. The permittee shall place the signs at or near the CSO outfalls and ensure that the signs are easily readable by the public. The signs shall have **minimum** dimensions, information and appearance as specified in the Discharge Notification Requirements page of this permit.
 - b. The permittee shall implement a public notification program to inform citizens of the location and occurrence of CSO events. As long as the Department of Health provides a public notification program, the permittee may submit a summary of the DOH program in the annual BMP report, rather than developing their own program. The program shall include a mechanism (public media broadcast, standing beach advisories, newspaper notice etc.) to alert potential users of the receiving waters affected by CSOs and a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to CSOs.
14. **Annual report** - The permittee shall submit an annual report summarizing implementation of the above best management practices (BMPs). The report shall list existing documentation of implementation of the BMPs and shall be submitted by April 1st of each year to the offices listed on the Recording, Reporting and Additional Monitoring page of this permit. Examples of recommended documentation of the BMPs are found in Combined Sewer Overflows, Guidance for Nine Minimum Controls, EPA, 1995. The actual documentation shall be stored at a central location and be made available to DEC upon request.

X LONG-TERM CONTROL PLAN

DEC and the Permittee have entered into an Administrative Order on Consent, *In re City of New York and the New York City Department of Environmental Protection*, DEC Case No. CO2-20000107-8, effective January 14, 2005, concerning the Permittee's Combined Sewer Overflow ("CSO") abatement program. In addition to the Monitoring Requirements for CSO Regional Facilities in Item VIII and the CSO Best Management Practices set forth in Item IX, the CSO Order on Consent, which is attached hereto, governs the Permittee's obligations with regard to its CSO abatement program which includes, but is not limited to, design and construction of CSO abatement facilities and the submission of Waterbody / Watershed Facility Plan Reports (*i.e.* CSO Draft Long-Term Control Plans), Drainage Basin Specific CSO Long-Term Control Plans, and the City-Wide CSO Long-Term Control Plans. The CSO Order on Consent contains compliance schedules, which represent the shortest reasonable time within which to achieve water quality standards for the receiving waters. Modifications to the CSO Order on Consent will be publicly noticed for review and comment in accordance with Uniform Procedures Regulations, 6 NYCRR Part 621.

XI FIVE YEAR TOXICITY TESTING PROGRAM, TIER 1 - ACUTE TEST

The permittee shall implement an effluent toxicity monitoring program beginning in January of the calendar years below. Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in the preceding sentence unless a new deadline is set explicitly by such permit modification or renewal. The effluent toxicity testing program shall be as follows:

Effluent Toxicity Monitoring Requirements

Outfall No.	Reason for Testing Requirement	Sample Frequency	Sample Type
001	Toxic parameters in effluent.	Quarterly during calendar years ending in [5] and [0]	24 hr. Composite/renewal

- (a) Effluent Toxicity shall mean the toxicity of the effluent in acute static renewal tests specified as Tier 1 testing in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition, EPA/600/4-90/027F (1993) or most recent edition (herein referred to as the EPA Acute Manual). Both a vertebrate and invertebrate species shall be used for the tests. Where the outfall being tested is to estuarine or ocean waters, the marine organisms shall be tested. Where the outfall being tested is to freshwaters, freshwater organisms shall be tested. Dilution water shall be collected according to the EPA Acute Manual. Receiving water shall be used as dilution water unless the Department approves a different source. Effluent sampling and holding shall be done as outlined in the EPA Acute Manual, and should consist of 24 hour composite samples. Any deviation from procedures in the EPA Acute Manual requires prior written approval by the Department.
- (b) The 48-hour EC_{50} and 48-hour LC_{50} in % Effluent for both a vertebrate and an invertebrate species shall be determined and reported in accordance with the specified frequency. The 48-hour EC_{50} and 48-hour LC_{50} in % Effluent shall be compared to the Instream Waste Concentration (IWC) of the effluent calculated with a dilution ratio of 10.
- (c) The results of each toxicity test shall be submitted no later than 60 days following the end of each test period. These reports shall be submitted to the Chief, Compliance Section, Bureau of Water Compliance Programs, 625 Broadway, Albany, NY 12233-3506 and the Toxicity Testing Unit, Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3503.
- (d) Where practicable, monitoring of chemical and physical parameters limited in this permit shall be coordinated so that the resulting analysis is also representative of the sample used for toxicity testing.
- (e) Discharges which use chlorination as part of the waste treatment process should be dechlorinated prior to toxicity testing or samples shall be taken immediately prior to the chlorination system.
- (f) In accordance with NYSDEC guidance, the Department may determine that additional acute testing is necessary. If such additional testing is necessary, the permittee shall perform such testing upon written notification from the regional water engineer that such testing is necessary and the reason(s) why such testing is necessary.

XI FIVE YEAR TOXICITY TESTING PROGRAM, TIER 2 - CHRONIC TEST

The permittee shall implement an effluent toxicity monitoring program beginning in January of the calendar years below. Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in the preceding sentence unless a new deadline is set explicitly by such permit modification or renewal. The effluent toxicity testing program shall be as follows:

Monitoring Requirements

Outfall No.	Effluent Parameter	Units	Sample Frequency	Sample Type
001	Effluent Toxicity	% Effluent	Quarterly during calendar years ending in [5] and [0]	24 hr. Composite/renewal

- (a) Effluent toxicity shall mean the toxicity of the effluent in chronic static renewal tests as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, EPA/600/4-91/002 (1994), the EPA Chronic Manual for Marine Organisms (EPA/600/4-91/003(1994), or the most recent editions (herein referred to as the EPA Chronic Manuals). Both a vertebrate and invertebrate species shall be used for the tests. Where the outfall being tested is to estuarine or ocean waters, marine organisms shall be tested. Where the outfall being tested is to freshwaters, freshwater organisms shall be tested. Dilution water shall be collected according to the EPA Chronic Manuals. Each test run shall be 'bracketed' with a test of pure effluent and a test of effluent diluted sufficiently such that at least one diluted sample shows no toxic effects. Appropriate dilutions between the endpoints shall be tested to allow calculation of the Maximum Allowable Waste Concentration. Receiving water shall be used as dilution water unless the Department approves a different source. Effluent sampling and holding shall be done as outlined in of the EPA Chronic Manuals. Any deviation from procedures in the EPA Chronic Manuals requires prior written approval by the Department.
- (b) The Maximum Allowable Waste Concentration (MAWC) in % Effluent, for both a vertebrate and an invertebrate species, shall be determined and reported. The MAWC in % Effluent shall be compared to the calculated Instream Waste Concentration (IWC) of the effluent. The IWC in % Effluent shall be determined using a dilution ratio of 18.
- (c) The results of each toxicity test shall be submitted no later than 60 days following the end of each test period. These reports shall be submitted to the Chief, Compliance Section, Bureau of Water Compliance Programs, 625 Broadway, Albany, NY 12233-3506 and the Toxicity Testing Unit, Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3503.
- (d) Where practicable, monitoring of chemical and physical parameters limited in this permit shall be coordinated so that the resulting analysis is also representative of the sample used for toxicity testing.
- (e) Discharges which use chlorination as part of the waste treatment process should be dechlorinated prior to toxicity testing or samples shall be taken immediately prior to the chlorination system.

XI TOXICITY REDUCTION EVALUATION COMPLIANCE SCHEDULE

- (a) In accordance with Department guidance on whole effluent toxicity monitoring and control, Department staff will evaluate the results of acute and/or chronic toxicity testing of discharges authorized by this permit. Based on this evaluation, the DEC may require the permittee to perform a Toxicity Reduction Evaluation (TRE). The permittee shall be notified of any requirement to perform a TRE by letter notification of the DEC Regional Water Engineer, including the Department's rationale for such requirement. Within 60 days of such notification the permittee shall submit an approvable proposal for Toxicity Reduction Evaluation to the Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3502. The TRE proposal shall be directed towards identifying the source of the toxicity, describing procedures to reduce the toxicity to an acceptable level, identifying monitoring parameters suitable for insuring control of the toxicity, and proposing a schedule for completing the TRE.
- (b) Within 14 days of receipt of written approval of the TRE proposal by DEC Regional Water Engineer, the permittee shall implement the approved TRE proposal in accordance with the proposed schedule.
- (c) The completed TRE, including data findings and recommendations for corrective action, permit limits, and proposed self-monitoring requirements shall be submitted to the Bureau of Watershed Assessment and Research at the address noted in (a) on this page. The Department will review the TRE and may redraft the permit to incorporate one or more of the following, consistent with the provisions of applicable law and regulation: substance specific numerical limits, toxicity limits, monitoring requirements, and/or a schedule of compliance that will ensure acceptable toxicity levels of the effluent.

XII FLOW MANAGEMENT

(1) Flow Management Plan

(i) Within 180 days of when the permittee determines in accordance with paragraph 2 that the annual average flow value for a calendar year to the Bowery Bay WPCP has reached or exceeded 142.5 mgd (95 percent of the WPCP's 12-month rolling average permitted flow), the permittee shall submit to the regional water engineer a flow management plan to identify and implement reductions in hydraulic loading to the WPCP or failing that, approvable engineering reports, plans and specifications and/or capital improvements as necessary to stabilize annual average flows below the WPCP design flow. This plan shall be certified by a professional engineer licensed to practice in the State of New York and endorsed by the chief fiscal officer of the municipality. The provisions of the plan may reflect new efforts or may refer to existing, ongoing efforts. The flow management plan shall, at a minimum, include provisions for:

(a) A statement to the effect that the permittee has the authority in all parts of the WPCP service area to implement or cause to be implemented the provisions of this section or, if the permittee does not have such authority, a proposed schedule, not to exceed three years, to obtain such authority or a statement from the permittee's designated legal representative that existing law precludes the permittee from obtaining such authority;

(b) An inventory of all known facilities/projects that have applied to connect to the sewer system and a determination if there is capacity for connection;

(c) A schedule of implementation for all flow reduction measures identified herein;

(d) A map delineating the service area as defined; and

(e) A description of information that will be reported during implementation of the plan to the regional water engineer and a schedule for such reporting.

(ii) The flow management plan required by subparagraph (i) of this paragraph shall also include provisions for implementation of any or all of the following that are necessary to stabilize influent flows below design flows:

(a) Water conservation measures to reduce customer usage by measures including but not limited to customer metering, meter calibration, retrofitting existing plumbing fixtures with water conservation fixtures and revision of water rate structures;

(b) Reduction of infiltration and inflow through continuous measures including but not limited to sewer system metering, evaluation and rehabilitation, removal of roof leaders and footing drains from separate sanitary sewers and installation of separate storm sewers;

(c) Prevention of future sources of infiltration and inflow where feasible through measures including but not limited to implementation of standards for sewer installation and requirements to provide for adequate drainage from roof leaders and footing drains in new construction;

(d) Measures to maximize sewer system and sewage treatment works capacity at a minimum cost; and/or

(e) Approvable engineering reports and/or plans and specifications to assure annual average flows do not exceed 95 percent of the WPCP 12-month rolling average permitted flow.

(f) Capital improvements necessary to assure annual average flows do not exceed 95 percent of the WPCP treatment plant design flow.

(iii) Within 90 days of submittal to the regional water engineer of the plan required under subparagraphs (i) and (ii) of this paragraph, the permittee shall begin to implement the provisions of said program in accordance with the proposed schedule or cause the provisions of said program to be implemented by another party.

(iv) The regional water engineer may object to the plan, or implementation of the plan, submitted in accordance with subparagraph (i) and (ii) of this paragraph if the plan does not provide for substantive and effective measures to reduce hydraulic loading to the WPCP. Within 90 days of receipt of written notification from the regional water engineer documenting the aspects of the plan that must be revised, the permittee shall submit a revised plan that addresses the department's objection(s).

- (2) Annual Certification. The permittee shall certify in writing to the department as an attachment to its February Discharge Monitoring Report that the municipality is complying with the provisions of this section and, if applicable, is complying with the implementation schedule in the program adopted in accordance with paragraph 1 or if such compliance certification cannot be provided to the department, satisfactory explanation for deviation from the provisions of this section must be provided.

The annual certification will include the calculated annual average flow value for the preceding 12 months. If the annual average flow value is below 142.5 mgd (95 percent of the WPCP's 12-month rolling average permitted flow), the permittee may discontinue the flow management plan.

- (3) Rescission of Plan Requirements or Moratoria. The regional water engineer may rescind or hold in abeyance any or all of the conditions imposed under this section provided the permittee can demonstrate to the satisfaction of the department that:

(i) The conditions were implemented on the basis of erroneous data; or

(ii) The situation that gave rise to the imposition of the conditions has been adequately addressed; or

(iii) There is an existing or potential public health nuisance or hazard as determined by the state Department of Health, that is best remediated by rescinding or holding in abeyance the conditions; or

(iv) All compliance conditions in a SPDES permit or a judicially or administratively imposed order have been or will be met;

- (4) Violations of Permit Limits. Compliance with this section does not, in any way, shield the permittee from enforcement actions for violations of SPDES permit limits.

- (5) The regional water engineer may, by written approval, upon adequate demonstration of compelling need, allow for relaxation of schedules contained in this section.

XIII UNTREATED DISCHARGES**1. Reporting**

All bypasses, treatment reductions, process upsets and chlorination interruptions shall be reported to NYSDEC and responded to in the following manner:

- a. During normal working hours, Monday through Friday, except holidays, from 8 AM to 5 PM all events must be called into the Region 2 Office (Water Program) at (718) 482-4933. At all other times notification shall be made through the 24-hour DEC Spills Hotline at (800) 457 7362.
Note, prior approval from the DEC continues to be required for all anticipated events.
- b. For discharges that would affect bathing areas during the bathing season (May 15 to September 30), shellfishing areas or public drinking water intakes, the permittee shall, within two hours of confirmation by DEP or its contractors, report orally as specified above in Section 1.a any discharge of untreated or partially treated sewage, except a discharge due to a properly operating, wet weather combined sewer overflow or a discharge in accordance with a department approved plan for managing wastewater. Such a report shall include:
 - ii. A brief description of the incident;
 - iii. The location of the incident;
 - iv. The estimated volume and characteristics of the discharge at the time of the oral report;
 - v. A brief description of the measures taken to end the incident; and
 - vi. An estimate when the incident will be over and the total expected volume of the discharge.
- c. For all discharges not covered in Section 1.b above, DEP shall report non-compliance as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.
- d. Unless otherwise authorized by DEC, Region 2 Regional Water Engineer, the permittee shall ensure that corrective work for all bypasses, treatment reductions, process upsets and chlorination interruptions is performed on a 7 day per week, 24 hour per day basis.
- e. Unless otherwise authorized by DEC, Region 2 Regional Water Engineer, the permittee shall provide continuous chlorination for all planned and unplanned bypasses in areas of open shellfish harvest and shellfish relay areas and bathing areas during the bathing season (May 15 to September 30).
- f. For all unplanned bypasses which meet the chlorination criteria described in Section 1.e where it is anticipated abatement will require in excess of 24 hours, chlorination shall be initiated within 24 hours and shall proceed concurrently with abatement activities.
- g. DEC reserves the right to require chlorination in areas which does not meet the chlorination criteria described in Section 1.e.
- h. This provision supplements 6 NYCRR Part 750-1.2(a) and Part 750-2 regarding bypasses.
 1. At least 45 days before the initiation of an anticipated bypass or treatment reduction necessitated by construction or reconstruction of sewage treatment works, the permittee must provide the following to the Regional Water Engineer, USEPA and IEC:
 - (i) A demonstration that the bypass or treatment reduction is unavoidable and there are no feasible alternatives such as the use of auxiliary treatment facilities or retention of wastewater. Cost alone will not be sufficient reason to reject an alternative.
 - (ii) Document that the bypass or treatment reduction is a mitigating action which, over a subject period of time, will result in a lesser discharge of pollutants than otherwise would be the case.
 - (iii) Provide a plan identifying all work to be accomplished, work locations, crew size for each area and the number of hours needed to complete each task.

- (iv) Include a schedule, critical path method or bar chart format, with milestone events and time required to complete each activity. The schedule must be based on continuous round the clock work occurring concurrently at all possible sites.
- 2. Where concurrent work is not possible, justification must be provided. If the requested bypass or treatment reduction is found acceptable and written approval is received, a written confirmation of the schedule and staffing requirements shall be obtained from any contractor utilized to perform the work at least 24 hours before beginning work and a copy maintained at the work site.
- 3. By May 30th each year, the permittee shall submit a report which provides the following information for the period April 1st of the preceding year to March 31st of the reporting year:
 - (i) A summary and analysis of the causes of pumping station failures that result in bypassing; and
 - (ii) A summary and analysis of the causes of bypasses through regulators.

2. Abatement Procedures

For all dry weather discharges, in any drainage basin, DEP shall be required to submit schedules as follows, and then take the following actions, according to the timetable provided for in the schedules required below:

- a. within 30 days of the discovery of a previously unidentified dry weather discharge, permittee shall provide DEC with a schedule in writing for conducting the necessary investigative work to determine the source of the discharge, and for proposing an abatement program. This is to be known as the "Phase I Schedules". A dry weather discharge is defined as a discharge that contains visible sanitary material and/or exceeds a fecal coliform level of 800 FC/100 ml, BOD of 30 mg/L and Suspended Solid level of 30 mg/L. Unless DEC disapproves of the Phase I Schedule in writing within 15 days of receipt of the schedule, or unless DEC informs permittee in writing that it will require a specified additional period of time to complete its review, the schedule shall be deemed approved by DEC.
- b. on or before the end date of the schedule submitted in Phase I, permittee shall submit to DEC in writing an abatement program, with milestone dates, to abate the dry weather discharge. This is to be known as the "Phase II Schedule". Unless DEC disapproves of the Phase II schedule in writing within 15 days of receipt of the schedule, or unless DEC informs permittee in writing that it will require a specified additional period of time to complete its review, the schedule shall be deemed approved by DEC.
- c. on or before the scheduled date for completion of each abatement program, permittee shall provide DEC with written certification of the completion of such program, or the current status of each program and the expected completion date.
- d. within 30 days of discovering an untreated dry-weather discharge from a known permittee-owned sewer system outfall, permittee shall provide chlorination of untreated discharges in the following manner, unless otherwise authorized by DEC, Region 2. One basis upon which DEC Region 2 shall authorize no or limited chlorination shall be the impracticability of such chlorination based upon low or intermittent flow from any outfall or the unprotected nature of the outfall or public safety.
- e. For discharges into waters classified as "SA" and all adjacent waterways within 2 miles thereof, year-round chlorination must be provided for all untreated dry weather discharges from known permittee-owned sewer system outfalls that exhibit fecal coliform contamination levels of at least 800 FC/100 ml and a flow of at least 50,000 gallons per day.
 - i. For untreated discharges into waters classified as "SB" and all adjacent waterways within 2 miles thereof (except those into waters dealt with in the immediately following paragraph), seasonal chlorination (May 15th through September 30th) must be provided for all untreated dry weather discharges from known permittee-owned sewer system outfalls that exhibit fecal coliform contamination levels of at least 800 FC/100 ml and a flow of at least 50,000 gallons per day.
 - ii. For outfalls within 500 feet of a New York City-designated bathing beach, year-round chlorination must be provided for all untreated dry weather discharges from known permittee-owned sewer system outfalls.

- iii. For all other waterways, a seasonal chlorination must be provided for all untreated dry weather discharges from known permittee-owned sewer system outfalls that exhibit fecal coliform contamination levels of at least 800 FC/100 ml and a flow of at least 0.1 MGD.
- f. In the event the abatement of a dry weather discharge cannot be completed unless permittee obtains relief from the New York City Environmental Control Board, the milestone date for such discharge shall be extended for the period of time the enforcement action is pending, so long as permittee diligently prosecutes such action.
- g. Permittee shall be entitled to seek an extension of the Phase I and Phase II schedules. In seeking such an extension, permittee shall state in writing, reasons justifying the extension. DEC shall not unreasonably withhold its approval of any requested extension.

3. Sentinel Monitoring

Permittee must perform a sentinel monitoring program, at 80 ambient monitoring stations as agreed upon by DEC and permittee, consisting of the following elements:

- a. The baseline number and/or range for fecal coliform for each and every sampling station will be established as reported in the previous year's summary report as required in Section 3.f below.
- b. Using the established base-line numbers and/or ranges, any statistically significant exceedance of a base-line number and/or range will require permittee to commence an investigation. The investigation will consist of a survey of the adjacent shoreline, to be performed within 7 dry weather working days of receipt of sampling results. If a significant number of these statistically significant exceedances are simultaneously uncovered in different sections of New York City, then the permittee may request an extension of time to perform the investigations.
- c. Quarterly sampling for fecal coliform at each of the 80 monitoring stations as agreed upon by DEC and permittee must be performed, weather conditions permitting. Sampling can only be conducted after a minimum dry-weather antecedent period of 48 hours.
- d. If an untreated dry weather discharge is identified, permittee must act in accordance with Section 2.a above.
- e. Permittee must re-analyze the base-line numbers annually and recommend changes if necessary. DEC reserves the right to annually adjust the baseline numbers provided such adjustments are supported by data.
- f. Annual reports, including but not limited to all findings, analysis, data, sample results, sampling dates, dates of corresponding shoreline surveys, and proposed changes to base-line numbers (if necessary) must be submitted to DEC by June 30th of each succeeding year.

XIV PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

A. DEFINITIONS. Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section (PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS):

1. Categorical Industrial User (CIU)- an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
2. Local Limits - General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
3. The Publicly Owned Treatment Works (the POTW) - as defined by 40 CFR 403.3(o) and that discharges in accordance with this permit.
4. Program Submission(s) - requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and as approved by USEPA by letters dated January 26, 1987, March 25, 1991, June 19, 1992, December 21, 1992, June 24, 1993, May 31, 1996, June 24, 1998, and April 26, 2000;
 - a. Report Entitled: City of New York, Department of Environmental Protection, Industrial Pretreatment Program, dated May, 1983 (tasks 1 - 11), March, 1984 (DEP response to EPA comments), March, 1984 (Existing Pollutant Removals) and June, 1984 (Treatment Plant Removals).
 - b. Report Entitled: New York City Department of Environmental Protection, Rules and Regulations Relating to the Use of the Public Sewers, Including Sewer Surcharges, as amended on April 12, 1984.
 - c. Letter dated March 15, 1985 from George N. Lutzic to George Meyer.
 - d. Letter dated May 16, 1985 from Richard Bowers to George Meyer and amendments to that letter transmitted by letter dated April 18, 1986 from Richard Bowers to Richard Caspe.
 - e. Letter dated May 24, 1985 from Edward Wagner to Paul Molinari.
 - f. Letter dated May 25, 1985 from George Lutzic to George Meyer and amendments to that letter dated April 18, 1986 from Harvey Schultz to Richard Caspe.
 - g. Coastal Zone Consistency determination letter from Gail S. Shaffer to Larry A. Klein dated January 24, 1986.
 - h. New York City Department of Environmental Protection, Bureau of Water Pollution Control, Industrial Wastes Section Enforcement Strategy, dated January, 1985 (as amended but no less stringent).
 - i. Submissions by letter dated March 8, 1991 April 5, 1991 and May 29, 1991 from Larry A. Klein to Patrick M. Durack.
 - j. Submission by letter dated November 21, 1991 from Larry A. Klein to Patrick M. Durack (flammability requirement).
 - k. Submission by letter dated January 6, 1992 from Larry A. Klein to Patrick M. Durack (pH upper limit change to 11).
 - l. Submission by letters dated October 19, 1992 and October 23, 1992 from Larry A. Klein to Patrick M. Durack (Organizational restructuring and septage).
 - m. Submission by letter dated June 9, 1993 (cadmium limit).
 - n. Submission by letter dated December 19, 1995 from Robert Adamski to Patrick M. Durack (total silver halide best management practices).
 - o. Submission by letter dated June 12, 1998 from Robert Adamski to Patrick Durack (changes incorporating Best Management Practices for non-residential dischargers of grease and clarifying existing grease interceptor

requirements).

- p. Submission by letter dated March 6, 2000 from Robert Adamski to Walter Andrews and Patrick Durack (changes to enforcement response plan).
- q. And any future approved amendments.

5. Significant Industrial User (SIU) -

- a. CIUs;
- b. Except as provided in 40 CFR 403.3(t)(2), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
- c. Except as provided in 40 CFR 403.3(t)(2), any other industrial user that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
- d. Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.

6. Substances of Concern - Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.

B. IMPLEMENTATION. The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:

- 1. Industrial Survey. To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
 - a. Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
 - b. Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
 - c. Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all significant industrial users of the POTW.
- 2. Local Limits: The permittee shall provide a written technical evaluation of the need to revise local limits under 40 CFR 403.5 (c) (1). The schedule for providing written reports documenting the local limits technical evaluation shall not exceed:
 - a. April 1, 2003 - Analysis of the maximum allowable headworks load (MAHL) to the treatment plants based on final permit limits for pollutants listed in the permit. The headworks analysis shall include an explanation of the removal capabilities of each plant.
 - b. January 1, 2004 - Local limits technical evaluation based on the MAHL, domestic loading, and proposed allocation to non-domestic sources.
 - c. July 1, 2004 - Proposed revisions to local limits (if indicated by the technical evaluation) and implementation plan not to exceed April 1, 2006.
 - d. April 1, 2006 - Include revised local limits (if indicated by the technical evaluation) in permits issued to non-domestic users of the sewerage system.
- 3. Control Mechanisms. To provide adequate notice to and control of industrial users of the POTW the permittee shall:

- a. Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.
 - b. Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
4. Monitoring and Inspection. To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
 - (a) Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
 - b. The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
 - c. The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
 - d. Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
 - e. At a minimum, the permittee shall perform 700 inspections and 640 samplings during each calendar year. Said inspections and sampling events shall focus on significant industrial users, commercial and industrial facilities for toxic trackdown efforts targeting PCBs, and other toxicants of concern including headworks analysis.
5. Enforcement. To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
 - a. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
 - b. Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.
 - c. Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii).
 - d. Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.

6. Record keeping. The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with Part II. Section 10.3.a.
7. Staffing. The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program at an equivalent of 72 staff members. Equivalent staffing shall include, but not be limited to, the use of overtime, part time, seasonal, outside contract employees, consultants or other services.
- C. BIOSOLIDS PLAN. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the BIOSOLIDS plan.
- D. REPORTING. The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Programs Branch; USEPA Region II; 290 Broadway; 24th floor, New York, NY 10007-1966; a periodic report, prepared and submitted in accordance with the consistent periodic reporting format established by the Department in the document entitled NYSDEC POTW Periodic Pretreatment Report - 1994, that briefly describes the permittee's program activities over the previous year. This report shall be submitted to the above noted offices within 90 days of the end of the reporting period. The reporting period shall be annual with reporting period(s) ending on December 31.

The periodic report shall include:

1. Industrial Survey. Updated industrial survey information in accordance with 40 CFR 403.12(I)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
2. Implementation Status. Status of Program Implementation, to include:
 - a. Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
 - b. Listing of significant industrial users issued permits.
 - c. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results.
 - d. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
 - e. Toxic loadings from SIUs organized by parameters.
 - f. A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
3. Enforcement Status. Status of enforcement activities to include:
 - a. Listing of significant industrial users in Significant Non-Compliance (as defined by 40 CFR 403.8(f)(2)(vii)) with federal or local pretreatment standards at end of the reporting period.
 - b. Summary of enforcement activities taken against non-complying significant industrial users. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR Part 403.8(f)(2)(vii).

XV SCHEDULES OF COMPLIANCE**a) Total Residual Chlorine (TRC)**

Action Code	Outfall Number(s)	Compliance Action	Due Date
	001	<p>The Permittee shall submit a Full Scale Disinfection Testing Plan that will contain a testing protocol as well as identify one WPCP at which prototype testing of the chlorination/dechlorination process and UV disinfection will be conducted.</p> <p>The Permittee shall commence operations of the disinfection demonstration scale studies, including side-by-side prototype testing of a UV and chlorination/dechlorination technology at one of the five BNR WPCPs (Hunts Point, Bowery Bay, Wards Island, Tallman Island and Twenty-Sixth Ward).</p> <p>The Permittee shall submit a report on the overall operability and observed process performance of the selected disinfection studies.</p> <p>The Permittee shall submit a TRC Facility Plan to the NYSDEC, for review and approval, that identifies and describes the technology(s) to be implemented at the WPCP along with the associated design parameters, costs, operating protocols, schematics, and a preliminary schedule of construction.</p> <p>The Permittee shall submit, for DEC review and approval, final plans and applicable specifications, as well as a final schedule of construction, for the facilities described in the approved TRC Facility Plans.</p> <p>The Permittee shall commence construction of the facilities described in the approved TRC Facility Plan, plans and specs, and the final schedule of construction. The schedule of construction shall, upon approval, become a part of this permit.</p>	<p>10/01/06</p> <p>04/01/09</p> <p>10/01/10</p> <p>04/01/11</p> <p>DEC approval of Facility Plan + 1 year</p> <p>DEC approval of plans and specs + 1 year, but no later than 01/01/14</p>

b) Stormwater Pollution Prevention Plan

Action Code	Outfall Number(s)	Compliance Action	Due Date
	See storm water outfalls on WPCP site diagram	<p>Under USEPA regulation 40 CFR Part 122.26 (b)(14)(ix), the permittee's Water Pollution Control Plant discharges "storm water associated with industrial activity". The permittee shall, therefore, develop a Storm Water Pollution Prevention Plan SWPPP for the WPCP that meets the requirements of Part III of SPDES "<i>General Permit GP-98-03 for Storm Water Discharges Associated With Industrial Activity except Construction Activity</i>" and submit it to DEC for approval. Compliance with this requirement will exempt the permittee from the responsibility to seek coverage for this activity under GP-98-03, and its amendments.</p> <p>The permittee shall implement the approved SWPPP.</p>	<p>04/01/04</p> <p>DEC approval + 3 months</p>

c) Shoreline Survey

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All	<p>The permittee shall complete a Shoreline Survey of at least 50% of the shoreline of the City of New York as identified in consultation with DEC, and submit a report to DEC which identifies and characterizes all dry weather discharges of untreated sewage from the NYC sewer system.</p> <p>The permittee shall complete a Shoreline Survey of the remaining 50% of the New York City shoreline, and submit a report based on the results of these surveys.</p>	<p>April 1, 2003</p> <p>April 1, 2008 and every 5 years thereafter</p>

d) Outfall Identification

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All	<p>The permittee shall submit an updated Outfall List report that contains all permittee owned outfall locations, dimensions, type (sanitary, combined, MS4, pump station overflows, and stormwater), latitude and longitude in degrees, minutes and seconds, reference to the nearest street location, receiving water, contributing regulators and pump stations and whether telemetry, booming or netting are installed. The report shall be submitted as a spreadsheet.</p> <p>Upon receipt of the report, the Department may reopen the permit to make any necessary changes to the outfall lists in the permit.</p>	04/01/04, and every 1 year thereafter.

e) Combined Sewer Outfall BMP Requirements

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All	<p><u>Maintenance and Inspection Program</u> The permittee shall develop an approvable, written maintenance and inspection program in accordance with CSO BMP #1 of this permit and submit it to the Regional Water Engineer. The permittee shall implement the program.</p> <p><u>Wet Weather Operating Plan</u> The permittee shall develop and submit a wet weather operating plan in accordance with CSO BMP #4.</p> <p><u>Retrofit of Catch Basins</u> The permittee shall complete the retrofitting of catch basins in accordance with CSO BMP # 7 b.</p> <p><u>Public Education Programs</u> The permittee shall develop and submit a proposal and implementation schedule for development of public education programs in accordance with CSO BMP # 7 d. The proposal shall detail the City's legal authority for the proposed programs and examine alternatives.</p> <p>The schedule shall become a requirement of this permit.</p>	<p>07/01/03</p> <p>DEC approval + 3 months</p> <p>04/01/05</p> <p>04/01/08</p> <p>04/01/05</p> <p>Upon DEC approval of report</p>

f) **Pollutant Minimization Plan**

Action Code	Outfall Number(s)	Compliance Action	Due Date
	001	<p>For Bioaccumulative Chemicals of Concern (BCCs)¹ that are present at detectable levels² in the influent of the WPCP, as reported in the permittee's most recent annual priority pollutant scan, the permittee shall commence a 3-day high intensity monitoring program (HIM) for those parameters and submit the data to the DEC.</p> <p>If the HIM results in detectable levels of a BCC in at least 2 of the 4 samples (priority pollutant scan and 3 samples from HIM), the permittee shall develop and submit an approvable pollutant minimization plan (PMP) to DEC for that parameter. The PMP shall contain a pollutant mass balance and source track down using the EPA <u>Guidance Manual on the Development of Local Discharge Limitations Under the Pretreatment Program</u> as a guideline. The PMP shall include an analysis of potential significant sources (at least 5% of the estimated headworks loading) of the pollutant including industrial and non-industrial sources, non-active hazardous waste sites, storm water runoff, and wet and dry atmospheric deposition.</p> <p>If the PMP identifies controllable sources of the pollutant, it shall include a schedule to reduce the amount of the pollutant to the maximum extent practicable. It is recommended that the PMP examine voluntary source reductions (domestic and non-domestic sources), product substitutions, and other pollutant minimization programs to reduce the pollutant loading to the system, including but not limited to the following examples: household hazardous waste collection, dental and photo processing BMPs, sewer user notification of consequences of disposing toxic substances to the sewer system, and other pollution prevention methods.</p> <p>The schedule to reduce the amount of BCC in the influent of the treatment plant will become part of and enforceable under the SPDES permit.</p> <p>¹ chlordane, DDD (aka TDE), DDE, DDT, Dieldrin, hexachlorobenzene, hexachlorobutadiene, hexachlorocyclohexane (BHC), alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, mercury, mirex (dechlorane), PCBs, and toxaphene</p> <p>² Detectable levels are defined, for the purpose of this compliance schedule, as the least of the Practical Quantitation Limits identified in NYSDEC's <u>Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters</u>, December, 1988.</p>	<p>Upon receipt of the annual priority pollutant scan results</p> <p>Upon receipt of 2 of 4 detectable sample results for a BCC + 24 months</p> <p>Upon DEC approval of the schedule</p>

g) **Municipal Separate Stormwater Sewer System (MS4) Requirements**

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All MS4 Outfalls	<p><u>Sewer Use Regulations</u> In accordance with the time frames in the DEC-approved report, "Proposed Program and Schedule to Monitor and Control Toxicants of Concern from Industrial Facilities and Waste Handling Sties Associated with Storm Water Discharges into the MS4", the permittee shall reevaluate the need to amend NYC Sewer Use Regulations, including the use of best management practices, and if necessary submit a proposed plan in consultation with a citizen's advisory committee, along with a schedule for completion of the plan.</p> <p><u>Seasonal pollutant loads</u> The permittee shall submit a Report that includes cumulative estimates of seasonal pollutant¹ loads and representative flow-weighted averages of storm water discharges from the major (36" or greater in diameter or has a drainage area of 50 acres or more) MS4 outfalls in the drainage area.</p> <p><u>Stormwater monitoring program</u> The permittee shall develop, and submit to DEC for approval, a storm water monitoring program and sampling schedule, which shall be no less than once per year, for pollutants³ identified as being present at representative MS4 outfalls in the Supplemental Discharge Characterization Report. The monitoring program shall describe the location of the representative MS4 outfalls or field screening points to be sampled, why the location is representative, the frequency of sampling, the parameters to be sampled and a description of the sampling equipment.</p> <p><u>Trackdown and remediation</u> Should analysis show that any of the pollutants identified in the stormwater monitoring program are significantly⁴ and repeatedly contributing to a water quality violation, then within six months of these findings the permittee must develop, and submit to DEC for approval, a trackdown program and schedule to identify the source of the discharge of these pollutants into the MS4. "Repeatedly" means a recurrence within a year.</p> <p>The permittee will propose and implement, a DEC-approved correction program to reduce the discharge of these pollutants into the MS-4, if appropriate.</p> <p>The approved schedule in the trackdown program shall become a part of the SPDES permit.</p> <p>¹ BOD₅, COD, TSS, PAHs², dissolved phosphorus, total phosphorus, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, cadmium, copper, lead, zinc, and mercury ² PAHs to be included are naphthalene, acenaphthylene, fluorene, phenanthrene, anthracene, fluouranthene, pyrene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, benzo(g,h,i)perylene, benzo-k-fluoranthene, benzo(a)anthracene, chrysene, and benzo(b)fluoranthene. ³ Non-polar material, PCBs, tetrachloroethylene, As, Cd, Cu, Hg, Ni, and Pb. ⁴ The permittee shall submit a proposal to identify "significantly contributing to a water quality violation" for DEC approval by 10/01/03. The definition of significant will be based on a multiple of baseline background data. If the identified significant violation recurs within the period of one year, then the trackdown program will be triggered.</p>	<p>November 1, 2003</p> <p>February 1, 2003</p> <p>July 1, 2003</p> <p>DEC approval of monitoring program and schedule</p> <p>Upon completion of the trackdown program</p> <p>Upon DEC approval of trackdown program</p>

h) **Additional MS4 Requirements**

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All MS4s	<p><u>Industrial Permits</u></p> <p>The permittee shall update and submit to DEC the inventory of industrial and waste handling facilities discharging to the MS4 that are engaged in activities specified by the SIC codes listed at 40 CFR Part 122.26 (b)(14), previously submitted. The inventory, organized by drainage area, must include the name and address of each facility along with a description that best reflects the principal products or services provided (such as a SIC code) by the facility. The inventory must also indicate which of these industrial facilities or waste handling sites are already regulated by DEP's Industrial Pretreatment Program.</p> <p>The permittee shall continue to implement its proposed program and schedule to monitor toxicants of concern¹ from industrial facilities and waste handling sites associated with stormwater discharges into the MS4.</p> <p><u>Assessment of Controls</u></p> <p>The permittee shall submit a report on the progress of meeting all MS4 requirements. The report must include:</p> <ol style="list-style-type: none"> 1- the status of implementing and the components of the MS4 requirements 2- proposed changes to the MS4 requirements 3- revisions, if necessary, to the assessment of controls required by the MS4 requirements 4- a summary of the data, including monitoring data, that are accumulated throughout the reporting period 5- a summary describing the number and nature of enforcement actions, inspections, and public education programs 6- identification of water quality improvements or degradation, and 7- if storm water is shown to significantly contribute to the contravention of water quality standards (including on a near field basis), the permittee must submit a description of additional proposed BMPs and/or control techniques in order to reduce the discharge of pollutants from the MS4. <p>¹ Non-polar material, PCBs, tetrachloroethylene, As, Cd, Cu, Hg, Ni and Pb.</p>	<p>April 4, 2003 and once every three years thereafter</p> <p>April 4, 2003</p>

i) **Reliability & Engineering Operations**

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All	<u>Inventory</u> The permittee shall submit an approvable report which shall include the following: 1. A detailed inventory and description of all wastewater treatment equipment required to achieve a minimum of primary treatment and disinfection up to two times the permitted flow. Such equipment shall be defined as critical equipment. 2. The inventory shall at a minimum include equipment and conduits at the WPCP, and emergency power equipment at each site. 3. All inventory entries must at a minimum include date of installation and a general description including capacity, rating and size, as relevant.	10/01/03
		<u>Contingency Plan</u> The permittee shall submit an approvable report which shall include the following: 1. A comprehensive plan to insure that a minimum of primary treatment and disinfection will be facilitated at the wastewater pollution control plant should any critical equipment or non-redundant component fail. 2. Site specific procedures detailing how untreated sewage discharges can be minimized by maximizing storage or by diverting sewage flow to treatment by an alternate route. 3. A prioritized schedule to test the soundness and/or reliability of all inventoried equipment and conduits wherever feasible.	04/01/04
		<u>Emergency Power Testing</u> The permittee shall submit an approvable schedule to implement the testing of emergency power on a load equal to that needed to achieve a minimum of primary treatment and disinfection at the WPCP. The testing must be scheduled to commence no later than July 1, 2003, unless additional construction will be required to meet this requirement. In that exceptional case, an approvable construction schedule must be submitted by EDPM + 4 months, and annual testing must commence no later than July 1, 2004. Results must be reported with the monthly Discharge Monitoring Report.	08/01/03
The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."			

j)

The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

k)

The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

XVI**DISCHARGE NOTIFICATION REQUIREMENTS**

(a)

The permittee shall, except as set forth in (c) below, maintain the existing identification signs at all outfalls to surface waters, which have not been waived by the Department in accordance with 17-0815-a and which have been previously agreed upon as outlined in the March 13, 2002 letter from DEP to DEC. The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

**NEW YORK STATE PERMITTED DISCHARGE POINT
(or WET WEATHER DISCHARGE POINT if a CSO)**

SPDES PERMIT No.: NY_____

OUTFALL No. : _____

If you see a discharge during dry weather, please call!

Permittee Name: _____

Permittee Phone: () - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: () - ### -####

(b)

For each discharge required to have a sign in accordance with a), the permittee shall provide for public review at a repository accessible to the public, copies of the Discharge Monitoring Reports (DMRs) as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of three years.

(c)

If, upon November 1, 1997, the permittee has installed signs that include the information required by 17-0815-a(2)(a), but do not meet the specifications listed above, the permittee may continue to use the existing signs for a period of up to five years, after which the signs shall comply with the specifications listed above.

(d)

The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

XVII**RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS**

- a) The permittee shall also refer to 6 NYCRR Part 750-1.2(a) and 750-2 for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**
- ☒ (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.
- ☐ (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 and must summarize information for January to December of the previous year in a format acceptable to the Department.
- ☒ (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7), within 60 days of the month following the end of the reporting period, and appended to the DMR.

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Water Compliance Programs
625 Broadway
Albany, New York 12233-3506
Phone: (518) 402-8154

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer, Region 2
1 Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
Phone: (718) 482-4933

Send an **additional copy** of each DMR page to:

Interstate Environmental Commission
311 West 43rd Street
New York, New York 10036

- c) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.
- d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- f) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- g) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- h) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

